```
2 -- CONSTRAINT (NOT NULL, UNIQUE, PRIMARY KEY, FOREIGN KEY,
 3 / *
 4 CREATE TABLE TABLE NAME (
 5 COLUMN NAME DATATYPE [DEFAULT] [CONSTRAINT], => 컬럼 제약조건
 6 [CONSTRAINT] => 테이블 제약조건
7);
8 * /
 9
10 / *테이블 삭제 * /
11 DROP TABLE DUMMY TBL;
12
13
14 /*테이블 생성 (데이터 무결성 유지)*/
15 CREATE TABLE DUMMY TBL (
16 ID VARCHAR2 (50), /*중복 비허용*/
17 PWD VARCHAR2(50), /*VARCHAR(50): 동적문자열타입, 50바이트 저장*/
18 NAME VARCHAR2 (50) NOT NULL,
19 ADDRESS VARCHAR2 (50),
20 REGDATE DATE DEFAULT SYSDATE, /*NULL값 들어올경우, DEFAULT 값
21 PRIMARY KEY (ID, PWD) /*테이블 레벨 제약조건*/
22);
23
24
25 / *데이터 입력*/
26 -- DML (INSERT, UPDATE, DELETE)
27 INSERT INTO DUMMY TBL
28
29
30 INSERT INTO DUMMY TBL(ID, PWD, NAME, ADDRESS)
31 VALUES ('FIRST', 'FIRST', 'FIRST');
32
33 INSERT INTO DUMMY TBL(ID, PWD, NAME)
34 VALUES ('SECOND', 'SECOND', 'SECOND');
35
36 INSERT INTO DUMMY TBL (ID, PWD, NAME)
37 VALUES ('FOURTH', 'THIRD', 'THIRD');
38
39 SELECT*
40 FROMDUMMY TBL;
41
42
43 INSERT INTO DUMMY TBL(ID, PWD, NAME, ADDRESS)
44 VALUES ('JSLIM', 'JSLIM', 'FIRST', 'FIRST');
45
46 INSERT INTO DUMMY TBL (ID, PWD, NAME, ADDRESS)
47 VALUES ('JSLIM', 'ADMIN', 'FIRST', 'FIRST');
48
49 -- 외래키 (REFERENCES)
```

```
50
51
52 SELECT*
53 FROMLOCATION;
54
55 CREATETABLE TABLE FK (
56 IDVARCHAR2 (20) PRIMARY KEY,
57 NAME VARCHAR2 (20),
58 LID CHAR(2) REFERENCES LOCATION (LOCATION ID) /*REFERENCE
59);
60
61 INSERT INTO TABLE FK VALUES ('JSLIM', 'ddo', 'A1');
62 INSERT INTO TABLE FK VALUES ('ADMIN', '섭섭이', NULL);
63
64 SELECT*
65 FROMTABLE FK;
66
67
68 SELECTLOC DESCRIBE, ID
69 FROMLOCATION L
70 JOINTABLE FK T ON (L.LOCATION_ID = T.LID);
71
72 / *테이블 생성* /
73 CREATE TABLE TB FK(
74 CLASS NO VARCHAR2 (50),
75 PROFESSOR NO VARCHAR2 (50),
76 PRIMARY KEY (CLASS NO, PROFESSOR NO),
77 FOREIGN KEY (CLASS NO) REFERENCES TB CLASS (CLASS NO),
78 FOREIGN KEY (PROFESSOR NO) REFERENCES TB PROFESSOR
79);
80
81 SELECT*
82 FROMTB CLASS;
83
84 SELECT*
85 FROMTB PROFESSOR;
86
87 INSERT INTO TB FK VALUES ('C0838900', 'P004');
88 INSERT INTO TB FK VALUES ('C0736753', 'P009');
89 INSERT INTO TB FK VALUES ('C2208800', 'P020');
90
91 SELECT*
92 FROMTB FK;
93
94 /*부모 테이블 생성 -> 자식 테이블 생성*/
95
96 -- CHECK
97
```

```
98 CREATE TABLE CK(
                                         000EH 00 070 B00 05 4.00
 99 EMP IDVARCHAR2 (20) PRIMARY KEY,
100 SALARY NUMBER CHECK (SALARY > 0),
101 MARRIAGE CHAR(1) CHECK (MARRIAGE IN ('Y', 'N'))
102);
103
104 INSERT INTO TABLE CK VALUES ('1', '100', 'Y');
105 INSERT INTO TABLE CK VALUES ('2', '100', 'Y');
106
107 SELECT *
108 FROMTABLE CK;
109
110
111 / *
112 수정구문
113 ALTER TABLE TABLE NAME
114 ADD COLUMN | CONSTRAINT테이블 추가
115 MODIFY COLUMN 수정
116 DROP COLUMN | CONSTRAINT 드롭
117
118 * */
119
120 DROP TABLE USER TBL;
122 CREATE TABLE USER TBL (
123 id varchar2 (20) PRIMARY KEY,
124 pwd varchar2 (20) NOT NULL,
125 name varchar2(20)NOT NULL
126);
127
128 -- 회원가입
129 INSERT INTO USER TBL VALUES ('JSLIM', 'JSLIM', 'JSLIM')
130
131 -- 로그인
132 SELECT*
133 FROMUSER TBL
134 where ID = 'JSLIM' AND PWD = 'JSLIM';
135
136-- SEQUENCE OBJECT (중복되지않는 값을 채번할 수 있는 객체)
137 -- NEXTVAL, CURRVAL
138
139 DROP SEQUENCE TODO TBL SEQ;
140
141
142 CREATESEQUENCE TODO TBL SEQ;
143
144 select todo tbl seq.nextval from dual;
145 select todo tbl seq.currval from dual;
146
```

```
147
148
149
150 CREATE TABLE TODO TBL (
151 SEQ number PRIMARY KEY,
152 TITLE varchar2 (50) NULL,
153 CONTENT varchar2 (50) NULL,
154 STARTDATE date DEFAULT SYSDATE,
155 STATUS varchar2 (50) DEFAULT 'N' CHECK (STATUS IN
156 ENDDATE date DEFAULT (SYSDATE + 7),
157 PRIORITY number ,
158 ID varchar2 (50) NOT NULL REFERENCES USER TBL (ID)
159);
160
161 INSERT INTO TODO TBL (SEQ, TITLE, CONTENT, PRIORITY, ID)
162 VALUES (TODO TBL SEQ.NEXTVAL, '목요일', '냉무', 1, 'JSLIM');
164 SELECT CONTENT
165 FROMUSER TBL
166 JOINTODO TBL USING (ID)
167 WHERE ID = 'JSLIM';
168
169
170 SELECT *
171 FROMTODO TBL;
172
174 ALTER TABLE USER TBL
175 ADD PRIMARY KEY(ID);
176
177 ALTER TABLE USER TBL
178 DROP PRIMARY KEY;
179
180
181 ALTER TABLE USER TBL
182 ADD ADDRESS VARCHAR2 (20) DEFAULT '서울';
183 / * 컬럼명 데이터타입 DEFAULT (선택) * /
185 alter table user tbl
186 DROP COLUMN ADDRESS;
187
188 SELECT*
189 FROMUSER TBL;
190
191
192 DROP TABLEUSER TBL CASCADE CONSTRAINTS ; /*제약조건 무시하고 테이블
193 DROP TABLETODO TBL CASCADE CONSTRAINTS ; /*원래는 자식부터
194
```

```
195
196
197
198
199
200
201
202 /* 1. 다음 설정을 참조하여 테이블을 생성하시오.*/
203
204 DROP TABLE CUSTOMERS;
205
206 CREATE TABLE CUSTOMERS (
207 CNO VARCHAR (255) NOT NULL,
208 CNAME VARCHAR (255) NULL,
209 ADDRESS VARCHAR (255) NULL,
210 EMAIL VARCHAR (255) NULL,
211 PHONE VARCHAR (255) NULL
212);
213
214 SELECT*
215 FROMCUSTOMERS;
216
217 DROP TABLE ORDERS CASCADE CONSTRAINTS;
218
219 CREATE TABLE ORDERS (
220 ORDERNO VARCHAR (255) NOT NULL,
221 ORDERDATE VARCHAR (255) NULL,
222 ADDRESS VARCHAR (255) NULL,
223 PHONE VARCHAR (255) NULL,
224 STATUS VARCHAR (255) CHECK (STATUS IN ('결제완료', '배송중',
225 CNO VARCHAR (255) NOT NULL
226);
227
228 SELECT*
229 FROMORDERS;
230
231 INSERT INTO ORDERS (ORDERNO, CNO, STATUS)
232 VALUES ('002', '551', '결제완료');
233
234
235
236 DROP TABLE ORDERDETAIL;
237
238 CREATE TABLE ORDERDETAIL (
239 ORDERNO VARCHAR (255) NOT NULL,
240 PNO VARCHAR (255) NOT NULL,
241 OTY VARCHAR (255) NULL,
242 COSTVARCHAR (255) NULL
```

```
243);
244
245
246 SELECT*
247 FROMORDERDETAIL;
248
249 DROP TABLE PRODUCTS;
250
251 CREATE TABLE PRODUCTS (
252 PNO VARCHAR (255) NOT NULL,
253 PNAME VARCHAR (255) NULL,
254 COSTVARCHAR (255) NULL,
255 STOCK VARCHAR (255) NULL
256);
257
258 SELECT*
259 FROMPRODUCTS;
260
261 ALTER TABLE CUSTOMERS ADD CONSTRAINT PK CUSTOMERS PRIMARY KEY
262 CNO
263);
264
265 ALTER TABLE ORDERS ADD CONSTRAINT PK ORDERS PRIMARY KEY (
266 ORDERNO
267);
268
269 ALTER TABLE ORDERDETAIL ADD CONSTRAINT PK ORDERDETAIL PRIMARY
270 ORDERNO,
271 PNO
272);
273
274 ALTER TABLE PRODUCTS ADD CONSTRAINT PK PRODUCTS PRIMARY KEY (
275 PNO
276);
277
278 alter table orders add constraint fk customers to orders 1
279 CNO
280)
281 REFERENCES CUSTOMERS (
282 CNO
283);
284
285 ALTER TABLE ORDERDETAIL ADD CONSTRAINT
286 ORDERNO
287)
288 REFERENCES ORDERS (
289 ORDERNO
290);
291
```

```
292 ALTER TABLE ORDERDETAIL ADD CONSTRAINT

FK_PRODUCTS_TO_ORDERDETAIL_1 FOREIGN KEY (
293 PNO
294)
295 REFERENCES PRODUCTS (
296 PNO
297);
298
299
300
301
302
303
304
```